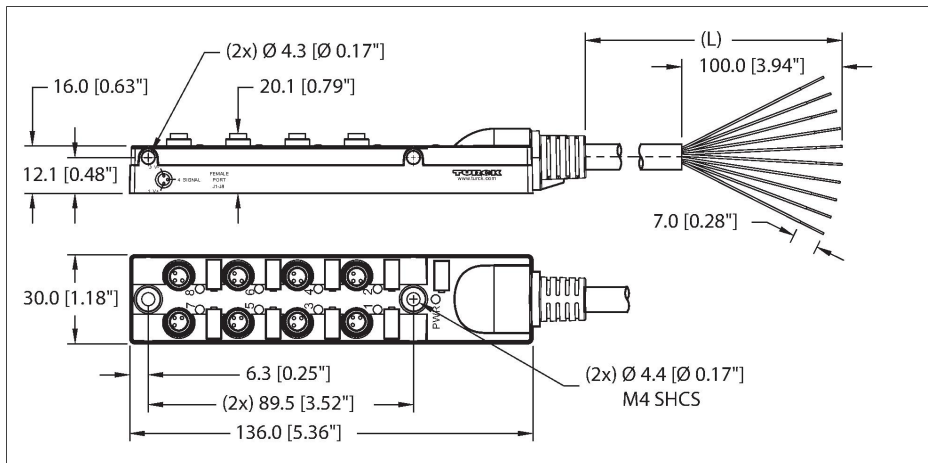


# TB-8M8Z-3P2-0.5

Junction Box - Actuator/Sensor, 8-port – M8, 3 pole I/O port with cable homerun



## Technical data

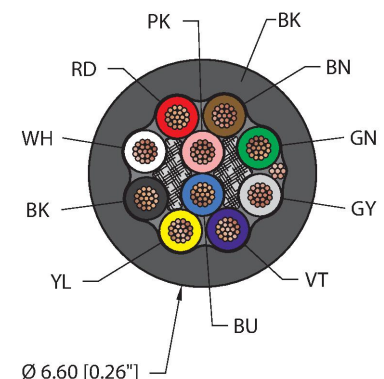
|                                 |                                              |
|---------------------------------|----------------------------------------------|
| Type                            | TB-8M8Z-3P2-0.5                              |
| ID                              | UX09199                                      |
| Distributed I/O                 | Junction box, 8, with integral homerun cable |
| Housing                         | Plastic, PA 6 GF30, Black                    |
| Display operating voltage       | LED, green                                   |
| Display switching state         | LED, yellow                                  |
| Switching function              | PNP                                          |
| I/O Port                        | Female, Ø 8 mm                               |
| Design specification            | Acc. to IEC 61076-2-104                      |
| Number of contacts              | 3                                            |
| Contacts                        | Brass, CuZn, Gold-plated                     |
| Contact carriers                | Plastic, PA 6 GF15, Black                    |
| Connector seal                  | O-ring, Plastic, FKM/FPM                     |
| Mechanical life                 | > 100 Mating cycles                          |
| Pollution degree                | 3                                            |
| Protection class (When coupled) | IP67                                         |
| Homerun connector               | Cable, Side exit                             |
| Cable data                      |                                              |
| Cable ID                        | RF50836                                      |
| Total number of conductors      | 10                                           |
| Cable diameter                  | Ø 6.6 mm                                     |

## Features



- Housing material: Nylon
- Housing color: Black
- Fully encapsulated
- Protection class: IEC: IP67
- CE compliant
- RoHS compliant
- LED (PNP circuit)
- I/O port: 3-pin
- General Purpose Cable
- Black PVC jacket, shielded, 10X24 AWG
- -40 Cold Bend Rating
- Flame Ratings: UL1061, CSA FT1
- Cable length: 0.5 m

## Cable cross section



## Technical data

|                               |                                                           |
|-------------------------------|-----------------------------------------------------------|
| Length (L)                    | 0.5 m, (+50mm or 4% of length/-0.0, Whichever is greater) |
| Cable jacket                  | PVC, Black                                                |
| Shield                        | Aluminum/polyester (IN)                                   |
| Cable drain                   | 26 AWG, TC (Tinned Copper)                                |
| Conductor diameter            | 0.044 "                                                   |
| Conductor material            | TC (tinned copper)                                        |
| Conductor insulation material | PVC                                                       |
| Conductor size                | 10 x 24 AWG [Similar to 0.25 mm <sup>2</sup> ]            |
| Number of strands x O.D.      | 19 x 36 AWG                                               |
| Conductor colors              | BU, PK, BN, GN, GY, VT, YL, BK, WH, RD                    |

### Electrical properties at +20 °C

|               |                                           |
|---------------|-------------------------------------------|
| Rated voltage | 30 VDC                                    |
| Rated voltage | DC VDC                                    |
| Current       | 2 A per signal contact, total current 6 A |

### Mechanical and chemical properties

|                                     |                 |
|-------------------------------------|-----------------|
| Bending radius (static)             | ≥ 5 x Ø         |
| Bending radius (dynamic)            | ≥ 15 x Ø        |
| UL cold bend rating                 | -40 °C          |
| Ambient temperature range (static)  | -40 °C...+85 °C |
| Ambient temperature range (dynamic) | 5 °C...+85 °C   |
| Temperature range (installation)    | -10 °C...+85 °C |

### Approval

|           |            |
|-----------|------------|
| Approvals | CE<br>RoHS |
|-----------|------------|

### Note

- Flex ratings may be reduced if used in extreme temperatures, exposure to certain chemicals, operating above the rated cycle speed, or operating below the rated cable bend radius.

- We reserve the right to make technical alterations without prior notice.

## Contact assignment

I/O Connector



## Scope of delivery

| Device         | Quantity | Description                           |
|----------------|----------|---------------------------------------|
| Junction boxes | 1        | Passive actuator/sensor junction box  |
| PSGK-MC        | 2        | Closure caps for M8 female connectors |
| KS5/10         | 9        | Labels                                |

## Accessories

| Ident-No. | Part Number                          | Description                                                                                                                            |
|-----------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| U0915-15  | BKM 14-836-5                         | Connection cordset, female, M16, 14-pin, straight, 5m * (homerun)                                                                      |
| U2-07158  | BK 14-0                              | Field-wireable, female, M16, 14-pin, straight                                                                                          |
| U2-07157  | BS 14-0                              | Field-wireable, male, M16, 14-pin, straight                                                                                            |
| U0092-00  | PSG 3-2                              | Cordset, male, Ø 8 mm (snap), 3-pin, straight, 2m * (I/O port)                                                                         |
| U0138-2   | PSW 3-2                              | Cordset, male, Ø 8 mm (snap), 3-pin, right-angle, 2m * (I/O port)                                                                      |
| A1050     | KS 5/10 (10/LABELS)                  | Labels                                                                                                                                 |
| U2-11982  | PSGK-MC (8/BAG)                      | Dust cap, male, Ø 8 mm (snap), (8/BAG)                                                                                                 |
| A900154   | TORQUE-WRENCH-SET-M12&M8-LEGACY      | Torque wrench set, Torque driver, torque setting tool, M12 fitting, M8 fitting.                                                        |
| A900102   | PICOBX ADAPTOR PLATE, 8 PORT (1PACK) | For mounting new style picobox to existing mounting holes. Allows new picobox to utilize the previous version mounting hole locations. |

\* Other lengths available on request

## Circuit Diagram

